APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,206	10/09/2001	John M. Harris	CE08991R	5804

38107	7590	10/04/2005		EXAMINER

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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	EXAMINER
	LIOU, JONATHAN

ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/973,206	HARRIS, JOHN M.
	Examiner	Art Unit
	Jonathan Liou	2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 October 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-14</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-8 and 10-14</u> is/are rejected.

7)☒ Claim(s) <u>9</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>09 October 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All · b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The abstract of the disclosure is objected to because "based on" on lines 3 of

abstract repeated twice. The examiner suggests the applicant to delete one of "based

on", which appears on the line 3 of abstract. Correction is required. See MPEP

§ 608.01(b).

2.   The disclosure is objected to because of the following informalities:

On lines 25-26 of page 4 in the specification, the term of "comprises steps of"

repeats twice, and one of them need to be deleted.

On line 3 of page 5 in the specification, ".n" should be replaced with "in."

On lines 22 of page 15, "infrastructure 103" should be replaced with

"infrastructure 130."

Appropriate correction is required.

Claim Objections

3.   Claims 3 and 6 are objected to because of the following informalities: on the line

2 of claim 3 and 6, the term "when the" repeats twice, one of them need to be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

5.   Claim 8 is rejected under 35 U.S.C. 102(e) as being anticipated by Butler et al.

(US Pat. No. 6,545,989.)

6.   As per claim 8, Butler teaches in a packet data communication system

comprising a transmitting communication device and a receiving communication device

that are each in wireless communication with a wireless infrastructure (**Butler teaches**

a system comprises a transmitter and receiver, and both are in a wireless

communication system. See col 1, lines 15-19 and col 15, lines 54-67). Butler also

teaches a method of conveying data from the transmitting communication device to the

receiving communication device (**See col 12-13, lines 41-7**), comprising steps of:

establishing a reverse link between the transmitting communication device and

the wireless infrastructure; (**col 12, lines 41-48.**)

establishing a forward link between the wireless infrastructure and the receiving

communication device (**Butler teaches forwarding link is sent from the**

infrastructure to the receiving communication device. See col 13, lines 1-6),

wherein the reverse link is established prior to the establishment of the forward link (**See**

col 12-13, lines 41-7); and signaling a user of the transmitting communication device to

begin transmitting data prior to the establishment of the forward link (**Since the reverse**

link is prior the forward link, the transmitting communication device transmitted

data prior to the establishment of the forward link. See col 12-13, lines 41-7.)

7.   Claims 10-11 are rejected under 35 U.S.C. 102(e) as being anticipate by Shaffer

et al. (US Pat. No. 6,683,889.)

8.   As per claim 10, Shaffer et al. teach a method for determining a size of a jitter

buffer (**Fig. 6**), comprising steps of:

Determining a number of retransmissions permitted of an erroneously received

frame, and determining a size of the jitter buffer based on the determined number of

permitted retransmissions (**Shaffer et al. teach the time interval information may

then be analyzed to determine jitter characteristics for the jitter buffer. This

includes analyzing the incoming packet rate, which could be interpreted as a

number of retransmissions permitted. Then, Shaffer et al. also teach dynamically

adjusts jitter buffer depth based on the analyzing information. See col 5, lines 14-

22.**)

9.   As per claim 11, Shaffer et al. teach determining a number of bearer channels

over which the frame is being transmitted (**Shaffer et al. teach determining the

channel usage for call signaling and call set up, which could the call are

considered the frames. See col 3, lines 36-37, and col 4, lines 41-65.**), and wherein

the step of determining a size of a jitter buffer comprises a step of determining a size of

a jitter buffer based on the determined number of permitted retransmissions and on the

determined number of bearer channels (**Shaffer et al. teach to determine the jitter

buffer size based on the packet arrival information, which could be the**

information, number of packet, the time period of silent, and the number channels

usage in the buffer. See col 5, lines 23-40.)

Claim Rejections – 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1-2 and 4 are

11.   Claim ~~1 is~~ rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et

al. (US Pat. No. 6,683,889.)

12.   As per claim 1, Shaffer et al. teach a method for determining a jitter buffer depth

target (**Fig. 6**). Shaffer et al. teach determining a radio frequency (RF) load metric and

comparing this to an RF load threshold to produce a comparison in order to determine a

jitter buffer depth target based on the comparison (**Shaffer et al. teach the packets are**

received into the jitter buffer, and the packets could be the audio signal, which

could be interpreted as the radio frequency signal as claimed. See col 3, lines 33-

41, and col 5, line 27. The packet received into the buffer is a load as claimed.

Shaffer et al. also teach comparing this to threshold and determine the jitter

buffer size. See col 5, lines 30-38.) Shaffer et al. does not specifically teach a radio

frequency load metric corresponding to a base site. However, Shaffer et al. teach

different audio codec to be used for implementing different received signal (**col 3, lines**

32-45 and col 4, lines 14-27.) Although Shaffer et al. does not specifically teach the

received signal is according to the base site, Shaffer et al. teach to receive the

sequence audio packets, which need to be transmitted from other terminal or server via

the base station as the basic telecommunication theory. Thus, it would have been

obvious for one who have ordinary skill in the art at the time of the invention was made

to determining a radio frequency load metric corresponding to a base site because

Shaffer et al. teach audio codec to analysis the received audio signal (**col 3, lines 32-45**

and col 4, lines 14-27.)

13.   As per claim 2, Shaffer et al. teach when the determined radio frequency (RF)

load metric is greater than the RF load threshold, a jitter buffer depth target is used that

is appropriate for a communication using retransmissions (**See Fig. 6. When the load**

is greater than T2, the jitter buffer depth target is used that is appropriate for a

communication using retransmissions as the feedback shown in Fig. 6.)

14.   As per claim 4, Shaffer et al. teach when the determined retransmit erroneously

received frames when the determined radio frequency (RF) load metric is greater than

the RF load threshold. (**Shaffer et al. when the retransmission, the whole process**

would repeat; then, the retransmit packets in the jitter buffer would be

reevaluated. Col 5-6, lines 23-4.)

15.   Claims 3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Shaffer et al. (US Pat. No. 6,683,889.) as applied to claim 1 above, and further in

view of Kwan (US Pat. No. 6,504,838.)

16.   As per claims 5 and 7, Shaffer et al. teach the method in the claim 1. Shaffer et

al. does not specifically teach a jitter buffer depth target is used is appropriate for a

communication using a reduced number of retransmissions and determining to reduce

use of retransmissions when the determined load is less than threshold. However,

Kwan teaches when the jitter buffer is below a predetermined threshold level, the clock

logic reduces the transmission rate of the data pump transmitter (**col 63, lines 55-64,**

Kwan.) By reducing the transmission rate, the number of retransmissions is also

reduced. Kwan also teaches determining reduce the retransmission (**col 63, lines 45-**

54, Kwan.) Since Kwan's invention teaches a method of transmitting data includes

receiving data from a network, detecting network jitter from the received data, adding

spoof data to the received when the detected network jitter exceeds a threshold, and

transmitting the received data with the added spoof data to a telephony device (**col 1-2,**

lines 66-4, Kwan); thus, it would have been obvious for one who have ordinary skill in

the art at the time the invention was made to determining reduced number of

retransmissions when the load is less than threshold.

17.   As per claims 3 and 6, Kwan teaches the echo suppressor is used when the

energy level of the line echo is below the audible threshold, otherwise an echo canceller

is used. The echo suppressor is used because the noise is on acceptable level; thus, it

is obvious in the ordinary skill in the art for the high power level could be used to

transmit. The echo canceller is used because the noise is not in the acceptable level;

thus, it is obvious in the ordinary skill in the art for the low power to be used while the

load is greater than RF. The echo and noise effect are part of the jitter effect. Thus,

following the same rationale as applied to claim rejections 5 above, it would have been

obvious for one who have ordinary skill in the art at the time the invention was made to

transmit frames at a low or high power level by comparing the load with threshold.

18.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer

et al. (US Pat. No. 6,683,889.) as applied to claim 11 above, and further in view of Vaid

et al (US Pat. No. 6,119,235.)

19.   As per claim 12, Shaffer et al. teach the method claim 11 and determining a size

of a jitter buffer comprises based on the determined number of permitted

retransmissions and the round trip time period (**the round trip time period could be

the time from the timer as Shaffer et al. taught. See col 3, lines 23-48.**) Shaffer et

al. does not teach determining an amount of time that expires between the transmission

of an acknowledgment of an erroneously received frame and a reception of a

retransmitted frame in response to the acknowledgment over each of the traffic to

produce a round trip time period recited in claim 12.   However, Vaid et al. teach

determining the round trip delay time as claimed (**col 3, lines 1-14, Vaid et al.**) Since

Shaffer et al. teaches to determine the jitter buffer size could be based on time interval

(**col 5, lines 41-49, Shaffer et al.**) and Vaid et al. suggest that the method of their

invention could be implement on the jitter effects (**col 2, lines 5-13, Vaid et al.**), it would

have been obvious for one who have ordinary skill in the art at the time the invention

was made to determined number based on the round trip time period, which is produced

by Vaid et al.'s method.

20.   Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yeom et al. (US Pat. No. 6,917,607), in view of Cohen et al. (US Pat. No. 5,825,771.)

21.   As per claim 13, Yeom teaches a method for reducing system delay in a wireless packet data communication system (**col 1, lines 25-63, Yeom**) comprising a plurality of forward links and a plurality of reverse links, wherein each forward link of the plurality of forward links and each reverse link of the plurality of reverse links comprises a plurality of traffic channels and a supplemental channel (**Yeom teaches multiple reverse and forward links. See col 29, lines 26-36, Yeom. See col 7, lines 18-34 and col 7, lines 56-67, Yeom.**) the method comprising steps of:

Building a radio frequency (RF) link in a reverse link assigned to a first mobile station as part of a set up of a dispatch call involving a plurality of mobile stations (**Yeom teaches the mobile station send the control message to the base station of the mobile station via reverse link. See col 7, lines 56-67. Then, the message would be send from the base station to the mobile station via forward link. See col 7-8, lines 18-61, Yeom.**)

Assigning a supplemental channel in at least one of the plurality of reverse links and plurality of forward link to the dispatch call (**See col 7, lines 18-34 and col 7, lines 56-67, Yeom.**)

Yeom does not teach when there is a switch in who is speaking in the dispatch call, transmitting frames over the assigned supplemental channel and until jitter buffers of each of the non-speaker mobile station participating in the call are filled. Nevertheless, Cohen et al. teach to adjust the rate of the incoming datastream in order

to make of fullness level in the buffer when the speechbursts ends, which could be

considered as non-speaker mobile stations in the call. See col 7, lines 17-49, Cohen et

al. From speechburst starts to end; it has to have a switch to control. Cohen et al.

teach the method to provide real-time or near real-time communication of audio signals

via a data network (**col 1, lines 5-7, Cohen et al.**), and Yeom teach the mobile

communication system and a channel transmitting. The mobile communication system

need to have receiver to receive the audio system communication and specifically in the

real-time audio transmission. Therefore, it would have been obvious for one who have

ordinary skill in the art at the time the invention was made to transmit frames over the

assigned supplemental channel and until jitter buffers of each of the non-speaker mobile

stations are filled when there is a switch in who is peaking in the dispatch call because

Cohen et al.'s invention, audio receiver, is part of mobile communication, as the filed of

Yeom et al.'s invention.

22.   Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nicol

(US Pat. No. 6,757,367.)

23.   Nicol teaches the method for constraining a size of a jitter buffer (**Nicol teaches

the size of the jitter buffer could be increase or decrease depended on the

transmission rate. See col 25-26, lines 25-28, Nicol**) comprising steps of:

        erroneously receiving a frame and acknowledging the erroneously received

frame (**Nicol teaches receiving frames see 26., and teaches determining whether

or not the indication are received. See col 36, lines 37-54, Nicol**)

Counting down a holdoff time period, wherein the holdoff time period is a period

of time that expires. When the hodloff time period expires without the receiving a

retransmission of the acknowledged frame, retransmitting the acknowledgment. When

the erroneously received frame is a retransmitted frame or a non-audio information

frame, reducing a length of the holdoff time period (**Nicol teaches a waiting period**

and timeout to response retransmission. Nicol also teaches to transmit a

response message if the timeout occurs. See col 24-25, lines 42-3. Nicol further

teaches if voice information is inactive, the length of the hangover period can be

reduced. See col 13, lines 12-23, Nicol) However, Nicol does not teach a listener

mobile station awaits a retransmission. Nlcol teaches the gateway modem to wait for

the response. See col 24-25, lines 42-3. Nicol also teaches the application in the

telephone system and device, which could be used in the mobile device. Thus, it would

have been obvious for one who have ordinary skill in the art at the time the invention

was made to have a holdoff time period, that expires while a listener mobile station

awaits a retransmission of the erroneously received frame because the invention of

Nicol could be used on the telephony device (**see col 1, lines 52-63, Nicol**)

Allowable Subject Matter

24.   Claim 9 is objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Liou whose telephone number is 571-272-8136. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Liou   09/27/2005

RICKY NGO
PRIMARY EXAMINER